

WALLOWA/NEZ PERCE SALMON HABITAT RECOVERY PLAN IMPL.

9702500

SHORT DESCRIPTION:

maintenance and/or restoration of salmon habitat is a stated goal in the Wallowa County/Nez Perce Tribe Salmon Recovery Plan (Plan). The Plan documents habitat problems in Wallowa County and suggests solutions. Funding of this project will help to implement the Plan.

SPONSOR/CONTRACTOR: NPT

Nez Perce Tribe
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541/426-0119

SUB-CONTRACTORS:

Wallowa Soil and Water Conservation District

GOALS

NPPC PROGRAM MEASURE:

7.7B.1

RELATION TO MEASURE:

This project works with the Grande Ronde Model Watershed Program.

OTHER PLANNING DOCUMENTS:

Proposed Recovery Plan for snake River Salmon - Approach to Recovery, pg. V-1-6. Wy Kan Ush Me Wa Kush Wit - Recommendations, Vol.1, pg. 5A-2. The Wallowa County/Nez Perce Tribe Salmon Recovery Plan - Outline For Implementation of the Wallowa County Salmon Recovery Plan, pg. 101. The Grande Ronde Model Watershed Operations/Action Plan, Suggested Long Term Restoration Strategy - pg. 55.

TARGET STOCK

All anadromous stocks in Wallowa County

LIFE STAGE

All life stages found in Wallowa County

MGMT CODE (see below)

S,A,N,P,L,W

AFFECTED STOCK

All native resident fish populations found in Wallowa County

BENEFIT OR DETRIMENT

Beneficial

All native wildlife populations found in Wallowa County

Beneficial

BACKGROUND

Stream name:

various tributaries

LAND AREA INFORMATION

Subbasin:

Grande Ronde/Imha

Land ownership:

both

Hydro project mitigated:

N/A - BPA funding, in general, mitigates for the effects of the Federal hydropower system.

Acres affected:

2,000,000

Habitat types:

riparian, flood plain, uplands, ponds, and wetlands

HISTORY:

N/A - This is a new project for FY97.

BIOLOGICAL RESULTS ACHIEVED:

N/A - The money for FY97 has not been accessed yet. This project is on a calendar year which started 1/1/97.

PROJECT REPORTS AND PAPERS:

N/A - See above.

ADAPTIVE MANAGEMENT IMPLICATIONS:

N/A - See above.

PURPOSE AND METHODS**SPECIFIC MEASUREABLE OBJECTIVES:**

Improvements in water quality and quantity. Improvements in local landowner knowledge of requirements for native fish, plants, and wildlife.

CRITICAL UNCERTAINTIES:

A lack of success in returning salmon to the watersheds in Wallowa County may discourage people from continuing to participate. Some habitat projects may not perform as expected.

Natural events such as floods or fires may damage or destroy habitat restoration projects or overshadow any improvements in habitat conditions resulting from the projects.

Local residents do not control what happens downstream from Wallowa County. In other words, Wallowa County residents can not save the chinook in the Snake River basin nor can they insure that any salmon will survive to return to the County.

BIOLOGICAL NEED:

The County/Tribe Plan emphasizes the need to work in the entire watershed (ridge top to ridge top). Habitat condition trends are generally stable but target fish populations are decreasing. It is expected that this project will move the watersheds towards an improving trend and will improve instream survival of the target species. The population trends of many wildlife species are unknown but this project is expected to begin moving the upland and riparian area habitat conditions towards an improving trend.

HYPOTHESIS TO BE TESTED:

N/A

ALTERNATIVE APPROACHES:

N/A

JUSTIFICATION FOR PLANNING:

N/A - The project is broken into three parts: 1) implementation, 2) equipment needs, and 3) other expenses incurred to implement the project.

METHODS:

1) brief experimental design including a description of the equipment, techniques, and materials; N/A

2) statistical Analysis; N/A

3) type and number of fish to be used. N/A

The money budgeted for this project will be split three ways: 1) implementation, 2) equipment, and 3) expenses.

Implementation will consist of projects that fit the implementation portion of the County/Tribe Salmon Plan. The County/Tribe Plan provides a "laundry list" of projects that will correct habitat problems identified during the planning process. Streams in the County have been prioritized and this project will emphasize first priority streams over lower priority streams. Projects brought forward by landowners in lower priority streams, however, will not be ignored.

Equipment will consist of equipment presently lacking in the County and is considered essential for implementation of the County/Tribe Plan.

Expenses will consist of items including but not exclusive of: consulting fees, travel, and office expenses. The Nez Perce Tribe and the County Court will jointly decide how to expend the funds.

PLANNED ACTIVITIES

SCHEDULE:

Planning Phase **Start** 1/1/97 **End** ongoing **Subcontractor** None

Task 1) Identify on-the-ground projects that fit the County/Tribe Salmon Plan criteria. 2) Identify equipment needs. 3) Identify consultant needs or other items needed to implement the County/Tribe Plan.

Implementation Phase **Start** 1/1/97 **End** ongoing **Subcontractor** Yes

Task 1) Develop projects identified above and implement them. If the project is requested by private landowners or agencies, they will be expected to provide cost share for the project.
2) Monitor the projects.
3) Purchase equipment identified above.
4) Hire consultants or initiate other actions identified above.

O&M Phase **Start** 1/1/97 **End** ongoing **Subcontractor** None

Task Projects are maintained by the individual or agency requesting funding and a monitoring and maintenance plan are required in the application.

PROJECT COMPLETION DATE:

ongoing

CONSTRAINTS OR FACTORS THAT MAY CAUSE SCHEDULE OR BUDGET CHANGES:

- 1) NMFS/USF&WS consultation may be needed along with Biological Assessments.
- 2) Fill and removal permits may be needed.

OUTCOMES, MONITORING AND EVALUATION

SUMMARY OF EXPECTED OUTCOMES

Expected performance of target population or quality change in land area affected:

- 1) Instream habitat and water quality and quantity will be improved in Wallowa County.
- 2) Riparian habitat and upland habitat will be improved.
- 3) Egg-to-smolt survival will increase.
- 4) Local landowners will have a stake in restoration activities.

Present utilization and conservation potential of target population or area:

Chinook populations are seriously depressed. No sport harvest has occurred in Wallowa County since 1974. The Nez Perce Tribe has closed the County's stream to Tribal harvest.

Summer steelhead harvest has been limited to hatchery fish only since the mid- 1980s.

Wallowa County falls within the high to moderate range for Composite Ecological Integrity Ratings according to the "Status of the Interior Columbia Basin, Summary of Scientific Findings".

Assumed historic status of utilization and conservation potential:

The Nez Perce Tribe subsisted for thousands of years on the salmon returning to the Grande Ronde and Imnaha subbasins.

The estimated spring chinook escapement in 1957, developed for the Lower Snake River Compensation Plan, was 12,200 to the Grande Ronde Subbasin and 6,700 to the Imnaha Subbasin. For the same program, summer steelhead populations were estimated to be 15,900 in the Grande Ronde Subbasin and 4,000 in the Imnaha Subbasin.

It is assumed that all of the County would have fallen within the high range for Composite Ecological Integrity Ratings according to the "Status of the Interior Columbia Basin, Summary of Scientific Findings".

Long term expected utilization and conservation potential for target population or habitat:

Members of the Nez Perce Tribe and sport fishermen want the spring chinook runs increased to harvestable levels and the Nez Perce Tribe and Wallowa County residents would like to see all streams that historically produced salmon to once again have sustainable populations..

Contribution toward long-term goal:

This project will result in better understanding by local residents about the importance of good habitat conditions for various fish and wildlife species and how local residents can also benefit from these conditions. This knowledge, along with technical help, will result in improved habitat conditions for salmon that return to the subbasins in Wallowa County as well as for bull trout and other resident fish species and native wildlife species.

Indirect biological or environmental changes:

N/A

Physical products:

The FY97 funding for this project has been accessed yet. This project is on a calendar year which started 1/1/97.

Environmental attributes affected by the project:

water temperatures, flow, water quality, riparian condition, channel stability, woody debris recruitment, range/uplands condition

Changes assumed or expected for affected environmental attributes:

- 1) Improved riparian conditions which will help to maintain cooler stream temperatures, improve woody debris recruitment, stabilize stream channels, and provide increased food inputs from increased insect drop.
- 2) Improved flow conditions through better water management.
- 3) Improved water quality resulting from improved land management practices.
- 4) Improved passage through irrigation dams and low flow reaches.
- 5) Improved upland conditions through livestock management.

Measure of attribute changes:

N/A Individual habitat projects have not been identified yet.

Assessment of effects on project outcomes of critical uncertainty:

Redd count data will document the yearly return of chinook and steelhead to Wallowa County. This will not, however, address the critical uncertainty listed above that Wallowa County residents can not control what happens to anadromous fish once they leave the County.

Periodic habitat surveys conducted by the USFS and ODFW will provide trend data for habitat attributes and may be able to distinguish between cumulative project benefits and large scale events.

Individual project monitoring can determine whether the project is performing as expected and the watershed level monitoring plan being developed for the Grande Ronde Model Watershed program will help to determine if cumulative project effects are moving the watershed habitat attributes in the expected direction.

Information products:

All projects will have a monitoring component administered by the Wallowa Soil and Water Conservation District. The District will also produce the annual reports.

Coordination outcomes:

Close coordination will occur between the Nez Perce Tribe, the Wallowa County Court, and the Wallowa Soil and Water Conservation District to insure that the money is spent in the most effective manner to meet project objectives.

Meetings are being held to insure that monitoring is a coordinated effort between the different agencies. This will help to prevent duplication of effort.

The Grande Ronde Model Watershed Program will be kept informed of projects and outcomes.

MONITORING APPROACH

1) brief experimental design including a description of equipment, techniques, and materials;

Instream survival of chinook and steelhead should be measured and trends established. This will require accurate redd counts, spawners per redd information, fecundities by age, and spawner age structure. Radio tracking and/or doppler sonar might be used. Accurate egg-to-emergence survival data will be needed which will probably involve capping redds. Accurate emergence-to-emigration (juvenile or smolt stage) will be needed. This will involve juvenile and smolt traps running year round and snorkeling surveys.

Habitat attributes will need to be measured and trends established. The primary attributes will be 1) temperature (use thermographs), 2) sediment movement (use Iscos or turbidity meters), 3) sediment deposition (pebble counts or freeze coring (will also provide information on fines at depth)), 4) E. coli (appropriate sampling gear), 5) water quantity (permanent gage sites or regular onsite visits with a flow meter (should establish regular transects)), 6) other water quality parameters such as phosphates, nitrates, and heavy metals (appropriate sampling gear), and 7) visual observations or radio tracking to determine if passage projects are functioning as expected.

The COTR would be expected to review all project documents and monitoring data for technical merit and usefulness.

2) statistical analysis

A simple Students T Test or Chi Square would be sufficient to determine the significance of population and habitat trends. Relating these trends back to specific projects is more problematical.

3) type and number of fish to be used.

No fish would be needed unless marking or radio tracking is employed, at which time numbers would be determined. Marking would be for juveniles (freeze branding, CWTs, or PIT tags) and radio tags would be used for adults.

Provisions to monitor population status or habitat quality:

Annual spawning ground surveys are conducted for chinook and steelhead.

The USFS and ODFW conduct periodic habitat surveys using modified Hankin and Reeves protocols on public and private property.

A monitoring plan is presently being developed for the Grande Ronde Model Watershed program to look at changes at the watershed level and relate these changes to the composite of projects implemented in the watershed. BPA monitoring protocols are being used to standardize techniques used by the various agencies.

Most projects implemented in the County have photo points as a component of their monitoring plan.

Data analysis and evaluation:

The watershed level monitoring plan being developed will include evaluation criteria and protocols. Statistical significance measures will be included in the protocols.

Information feed back to management decisions:

Coordination meetings between the Nez Perce Tribe, Wallowa County Court, and the Wallowa Soil and Water Conservation District will be used to incorporate monitoring information or new research results into project selection and implementation.

Critical uncertainties affecting project's outcomes:

Since this is a "pie-in-the-sky" question, accurate information on presence/absence, population size, and population trends for mammals, birds, reptiles, amphibians, insects, and plants is needed to document the effectiveness of habitat restoration projects on a watershed level. Presently, very little information is available about the status of populations for most of the above list.

EVALUATION

Completed watershed restoration projects. Number of new landowners involved. Improvements in water quality and quantity. Improvements in watershed habitat conditions.

Incorporating new information regarding uncertainties:

The coordination efforts between the Nez Perce Tribe, Wallowa County Court, and the Wallowa Soil and Water Conservation District, and ODFW will be used to insure that if new uncertainties surface, they can either be answered or mitigated.

Increasing public awareness of F&W activities:

A major component of the project is local interaction, coordination, and education. This is through local landowner meetings, county coordination meetings, and the development and showing of an interactive computer graphics program that documents the development and implementation of the County/Tribe Plan. This Plan has been presented in Washington D. C. and at various locations in Oregon and Washington.

RELATIONSHIPS
RELATED BPA PROJECT

5518900 Grande Ronde Spring Chinook Captive Brood Program

8805301 Northeast Oregon Hatchery

9403900 Wallowa Basin Project Planning

9202601 Grande Ronde Model Watershed Administration/Implementation/Research

RELATED NON-BPA PROJECT

LSRCP/USF&WS

Wallowa County Natural Resource Advisory Committee/volunteer

RELATIONSHIP

Projects implemented in the Lostine River will benefit the captive brood project.

Fish need good habitat which this project will help to supply.

The money will pass through this project and the Project Planner will be involved with the County Court in deciding how the money is to be spent.

Wallowa County is part of the Model Watershed program.

RELATIONSHIP

Fish need good habitat which this project will help to supply.

Advises the County Court on natural resource issues as part of the implementation of the County/Tribe Salmon Plan

OPPORTUNITIES FOR COOPERATION:

- 1) This project will cooperate with the Grande Ronde Model Watershed program and the Wallowa Natural Resources Advisory Committee.
- 2) Opportunities for local resident's participation in planning and implementation of projects will be encouraged.
- 3) Habitat projects can be coordinated with the NEOH program.
- 4) Equipment purchased through this project will be shared with the Wallowa Soil and Water Conservation District, the Wallowa Extension Office, ODFW, and USFS.

COSTS AND FTE

1997 Planned: \$50,000

FUTURE FUNDING NEEDS:**PAST OBLIGATIONS (incl. 1997 if done):**

<u>FY</u>	<u>\$ NEED</u>	<u>% PLAN</u>	<u>% IMPLEMENT</u>	<u>% O AND M</u>
1998	\$50,000		100%	
1999	\$50,000		100%	
2000	\$50,000		100%	
2001	\$50,000		100%	
2002	\$50,000		100%	

FY OTHER FUNDING SOURCE**AMOUNT IN-KIND VALUE**

1998	local land owner or agency cost-sharematching funds from agencies or foundations	?? possibly part of the cost-share
1999	local land owner or agency cost-sharematching funds from agencies or foundations	?? possibly part of the cost-share
2000	local land owner or agency cost-sharematching funds from agencies or foundations	?? possibly part of the cost-share

2001	local land owner or agency cost-sharematching funds from agencies or foundations	?? possibly part of the cost-share
2002	local land owner or agency cost-sharematching funds from agencies or foundations	?? possibly part of the cost-share

OTHER NON-FINANCIAL SUPPORTERS:

Wallowa County Court, Wallowa Soil and Water Conservation District, NRCS, Grande Ronde Model Watershed Program, Wallowa County Extension Service, RY Timber, ODFW, USFS, BLM.

LONGER TERM COSTS: \$50,000
Continued implementation

1997 OVERHEAD PERCENT: 30%

HOW DOES PERCENTAGE APPLY TO DIRECT COSTS:

[Overhead % not provided so BPA appended older data.] Total direct costs which do not include subcontracts.

CONTRACTOR FTE: 0

SUBCONTRACTOR FTE: 1
